R E P O R T R E S U M E S

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THE ESTABLISHMENT OF THE RESEARCH COORDINATING UNIT IN THE CONNECTICUT STATE DEPARTMENT OF EDUCATION.

BY- RIGHTHAND, HERBERT AND OTHERS
CONNECTICUT STATE DEPT. OF EDUCATION, HARTFORD

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A RESEARCH COORDINATING UNIT WAS ESTABLISHED TO ENCOURAGE VOCATIONAL RESEARCH THROUGH THE IDENTIFICATION OF RESEARCH RESOURCES, PERSONNEL, AND TECHNIQUES. IN ADDITION, THE DEVELOPMENT OF PROPOSALS FOR THE CONDUCT OF VOCATIONAL EDUCATION RESEARCH BY LOCAL SCHOOL SYSTEMS, COLLEGES, AND UNIVERSITIES WAS ENCOURAGED. RESEARCH ACTIVITIES TO DATE TOTALLED 35 REPORTS, PILOT PROGRAMS, RESEARCH STUDIES, AND SURVEYS. OVER 250 PUBLICATIONS AND RESEARCH DOCUMENTS PERTAINING TO VOCATIONAL EDUCATION WERE CATALOGED AND FILED. INFORMATION OF 12 RESEARCH STUDIES CONDUCTED OR SUPPORTED BY THE UNIT AND A VOCATIONAL RESEARCH QUARTERLY NEWSLETTER WERE WIDELY DISTRIBUTED. INITIAL STEPS WERE TAKEN TO INCORPORATE USE OF DATA PROCESSING TO ASSIST THE RESEARCH STAFF. IT WAS CONCLUDED THAT THE UNIT GAINED WIDE ACCEPTANCE AS A GROUP WHICH PERFORMS NEEDED SERVICES IN THE DEVELOPMENT OF TECHNICAL AND VOCATIONAL EDUCATION. (GD)

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Division of Vocational Education
Connecticut State Department of Education
Hartford, Connecticut

Final Report
Project No. 6-21
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THE ESTABLISHMENT OF THE RESEARCH COORDINATING UNIT IN THE CONNECTICUT STATE DEPARTMENT OF EDUCATION

Project No. 5-0132
Contract No. OE-5-85-112

Research Coordinating Unit

Herbert Righthand, Director
Maurice J. Ross, Director

Philip T. Masley
Richard C. Wilson
Errol J. Terrell
Robert E. Bennett

November 1966

The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

DIVISION OF VOCATIONAL EDUCATION
CONNECTICUT STATE DEPARTMENT OF EDUCATION
HARTFORD, CONNECTICUT

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INTRODUCTION

Recognition of the importance of research to the Division of Vocational Education is not new. The Division of Vocational Education has maintained a Research Unit which has been active in the conduct of research since 1953. Since 1965, funds allocated under Section 4 (c) of the Vocational Education Act of 1963 have provided additional impetus for the strengthening and further development of vocational research in the state.

In June 1965, a "letter contract" approval was received from the U. S. Office of Education for the establishment of a Research Coordinating Unit in the Connecticut State Department of Education. The addition of this unit has further supplemented the research conducted by the Division of Vocational Education. It has also enabled the division to undertake vital research necessary for the maintenance and the initiation of new programs in vocational education as outlined in P. L. 88-210.

OBJECTIVES

The general objectives of the Research Coordinating Unit were to encourage vocational research through the identification of research sources, personnel and techniques. The purposes of the Unit were also to encourage local school systems, colleges and universities in the development of proposals for the conduct of vocational education research. The specific objectives of the Research Coordinating Unit in Connecticut were to initiate and conduct studies of:

1. Research Staffing Needs for the State Department of Education.
2. Methods of Collecting and Disseminating Research Results.

3. Techniques for Coordinating Research Activities.

4. Occupational Education Needs in the State.

5. Application of Data Processing Techniques to Research.

6. Occupational Trends and Emerging Occupational Fields.

7. Staff Participation in Conferences, Meetings and Seminars.

ACTIVITIES OF RESEARCH COORDINATING UNIT

JUNE 1, 1965 TO NOVEMBER 30, 1966

Summary of Activities

The following report of the Connecticut Research Coordinating Unit includes the activities which were conducted under the general objectives:

I. Research Staffing Needs for the State Department of Education.

A. Location. The Research Coordinating Unit is located in the Bureau of Vocational Services, State Office Building, Hartford, Connecticut, and is under the jurisdiction of the Director of the Division of Vocational Education and the Commissioner of Education.

B. Organization. The Unit operated under the Bureau of Vocational Services with Dr. Herbert Righthand and the Bureau of Research, Statistics and Finance with Dr. Maurice J. Ross. It also utilized the services of Mr. Errol J. Terrell, Consultant, Bureau of Vocational Services and Dr. James J. Naughton, Consultant, Bureau of Research, Statistics and Finance. Dr. Philip T. Masley, Consultant in Research had been assigned as coordinator of the Unit. Two assistant coordinators, Mr. Robert E. Bennett and Mr. Richard C. Wilson were assigned to the Unit temporarily during the first year (Appendix A1). As of September 1, 1966, Dr. Philip T. Masley replaced Mr. Errol

Terrell as Consultant in Research. Mr. Richard Wilson has been assigned to the newly created position of Associate Consultant in Research. Mr. Robert Bennett has been transferred to the position of Program Developer in the Division of Vocational Education. At this time, there are two position vacancies in the Research Coordinating Unit. The appointments of personnel to these position vacancies are dependent on the extension of the 4 (c) grant and the availability of qualified candidates (Appendix A2).

C. Permanent Vocational Research Unit. The Division of Vocational Education has maintained a full time consultant in research and one clerical assistant since 1953. This position is now occupied by Dr. Philip Masley. The Research Unit has been expanded to include Mr. Richard Wilson as Associate Consultant in Research and one additional clerical assistant on a permanent basis. This staff works in close cooperation with the Connecticut State Department of Education, Bureau of Research, Statistics and Finance. The salaries for the Vocational Research Unit are provided by State and Federal ancillary funds.

D. Continuation of the Research Coordinating Unit. The proposal submitted to the U. S. Office of Education for funding under Section 4 (c) of the Vocational Education Act of 1963 includes two consultants in research, two full-time clerks and consultative services as needed. The personnel requested are in addition to that of the permanent Vocational Research Unit.

II. Methods of Collecting and Disseminating Research Results.

A. Research Library. A vocational research library has been established by the research staff for the purpose of making available to the educational staff, the latest research findings. The vocational research library is located in the Charles D. Hine Library, State Office Building, Hartford, Connecticut.

B. Quarterly Research Newsletter. Over 1,000 Quarterly Research Newsletters have been disseminated to all fifty states, to Connecticut school administrators, directors of guidance, vocational directors, and to numerous federal, state and local agencies and institutions.

C. Annual Research Report. An annual research report by the State Department of Education, Division of Vocational Education was compiled by the Research Coordinating Unit staff. This report includes all the research conducted by the Research Coordinating Unit and the Division of Vocational Education. It includes abstracts of studies and surveys completed and underway. Copies of the annual report were sent to all fifty states and selected schools, institutions, agencies and organizations. Requests for research results compiled in the annual report have been honored in so far as possible.

D. Research Completed and Results Disseminated. The following surveys and studies listed below were sent to appropriate schools, organizations, institutions and agencies both within and outside the state of Connecticut.

		NUMBER DISSEMINATED
1.	Curricula Implications for Non-Farm Agricultural Employment in Connecticut.	1200
2.	A Survey to Determine the Need for Auto Body Workers in Connecticut.	50
3.	A State-wide Survey of the Manpower Needs in the Fisheries Occupations in Connecticut.	50
4.	The Development of a Work-Orientation Curriculum for Home Economics Related Occupations.	800
5.	A State-wide Survey of Manpower Needs in Air Conditioning and Refrigeration.	50
6.	1964 Graduate Follow-up.	40
7.	1965 Graduate Follow-up.	850
8.	Identifying Technical Institute Drop-outs.	40
9.	Report on the Vocational Education Training Institute for Local Educators.	40
10.	Connecticut's Need for Technicians.	40
11.	Health Service Occupations for The Hartford Labor Market Area.	450
12.	Health Service Occupations for the Waterbury Labor Market Area.	450

III. Techniques of Coordinating Research Activities

A. Bureau of Research, Statistics and Finance. The Research Coordinating Unit has coordinated its research activities

with the Bureau of Research, Statistics and Finance, of the State Department of Education.

B. State Advisory Committees. Coordination of research activities has been maintained with the existing State Advisory Committees in Agriculture, Business, Distributive Education, Trade and Industrial, Health, and Home Economics Education (Appendix B).

C. State Labor Department. The Connecticut State Labor Department has assisted the Research Coordinating Unit to the extent that both agencies have been working together to identify training programs which are in keeping with the labor needs of the state.

D. Food and Lodging Industries. Associations from the food and lodging industries have aided the research staff in initiating a state-wide survey to determine the occupational needs in this field.

E. Health Service Associations and Agencies. The Research Coordinating Unit has received assistance from representatives of the Connecticut State Department of Health, Medical and Dental Associations and other agencies that provide health services in order to determine the need for health occupations in the Hartford and Waterbury areas.

F. Auto Body Associations. Cooperation was sought and received from the president of the Greater Hartford Auto Body Association, who in turn contacted other auto body associations throughout the state, in order to conduct a survey to determine the need for auto body workers in the state.

H. Refrigeration and Air Conditioning Industries. The Research Coordinating Unit received cooperation from the various representatives of the air conditioning and refrigeration industries in conducting a state-wide survey of manpower and training needs in this area.

I. Local Schools and Institutions of Higher Learning. The State Department of Education has established a working relationship with local schools, universities and colleges for the conduct of research in vocational education.

J. Interstate Study. A joint study between Connecticut, New York State and New York University has been initiated for Predictive Testing as a Method of Selecting Entering Students for Trade Programs in Public Secondary and Vocational-Technical Schools.

K. Research Resources in Business and Office Education. Dr. Dean Malsbary, principal investigator of the office education study, Project No. 6528 is cooperating with the Division of Vocational Education in identifying, locating and ordering all of the significant studies in various aspects of business education, with particular emphasis on vocational office education. More than seventy studies have already been ordered.

L. Research Studies Forwarded to ERIC. The Research Coordinating Unit is cooperating with the Research and Development Center at the Ohio State University in collecting research reports for ERIC.

IV. Occupational Education Needs in the State.

A. Research by Vocational Unit and Research Coordinating Unit. The studies and surveys listed below have been initiated or completed by the Research Coordinating Unit:

	PROJECT NUMBER
1. Role of Data Processing in Vocational Education.	627
2. Five and Ten Year Graduate Follow-up.	632
3. Preliminary Study of Potential Enrollment for a Vocational-Technical School in the Bristol Area.	648
4. Potential Enrollment for a Vocational-Technical School in the Milford, Connecticut Area.	649
5. Projected Programs in Vocational Education for Connecticut.	651
6. Employers of 1964 Graduates.	652
7. Organizational and Activity Charts for Vocational Schools.	653
8. Graduates, Regional Vocational-Technical Schools 1964-1965.	654
9. State Technical Institute Graduates. 1964-1965.	655
10. Student Admission Report	656

		PROJECT NUMBER
11.	VEA Enrollment Reporting Procedures.	657
12.	Preliminary Survey of Hospital Employment Needs for the Greater Har ford and Waterbury Areas.	658
13.	F gional Vocational Technical hool and Technical Institute rollments 1963-1965.	659
14.	Survey of Health Occupations Curricula, 1964-1965.	6510
15.	A Statewide Survey of the Manpower Needs in the Fisheries Occupations in Connecticut.	6511
16.	A Study to Determine the Manpower Needs of the Air-Conditioning and Refrigeration Industry in Connecticut	6512
17.	Terminations for Three Month Period September - December 1964.	6513
18.	A Survey to Determine the Need for Auto Body Workers in Connecticut.	6514
19.	1965 Graduate Follow-up.	6515
20.	A Survey to Determine the Potential Enrollment in the Proposed Technical Institute to be located in the Orange-New Haven Area.	6516
21.	A Study to Determine the Need for a Technical Institute in the New London-Groton Area.	661

B. Research Studies by Local School and Others. The following research studies conducted by local schools and members of the Division of Vocational Education were completed or are underway:

1.	Non-Graduate Terminations in Connecticut Vocational-Technical Schools, 1964-1965.	6518

	PROJECT NUMBER
2. A Study of Certain Characteristics of the Graduates in Connecticut Vocational-Technical Schools.	6519
3. Reading Grade Levels for Accepted 9th and 10th Grade Students in Connecticut Vocational-Technical Schools.	6520
4. A Survey for A Pilot Research Study on the Occupational Status of School Leavers.	6527
5. Survey of Training Needs in Connecticut Plastics Industries.	6530

C. Cooperative Research between Research Coordinating Unit and Universities. These studies were supported by the Connecticut State Department of Education, Division of Vocational Education, and subcontracted with institutions of higher learning under Section 4 (c) of the Vocational Act of 1963, Contract No. OE-5-85-112:

1. Predictive Testing as a Method of Selecting Entering Students for Trade Programs in Public Secondary and Vocational-Technical Schools.	6517
2. Program Development in Vocational Education in Health Service Occupations at the Secondary and Post Secondary Levels for the Hartford and Waterbury Labor Market Areas.	6521
3. Business Education Curriculum Implications of the Effect of Technological Changes on the Types of Office Machines Used by Selected Connecticut Businesses.	6524
4. A Guide for Curriculum Experimentation in Food Handling and Distribution in High School and Post High School Vocational Training. A Preliminary Report.	6525

D. Doctoral Studies. The studies listed under this heading were supported by state and ancillary funds. The following summaries of the doctoral studies were printed by the Research Coordinating Unit:

	PROJECT NUMBER
1. Curricula Implications for Non-Farm Agricultural Employment in Connecticut.	6522
2. The Development of a Work Orientation Program for Home Economics Related Occupations.	6523

E. Research, Ancillary Funds. The following studies now underway were contracted with universities and by the Division of Vocational Education under Section 4 (a) under the Vocational Education Act of 1963:

1. A Study of the Opportunities for, Requirements of, and Knowledges, Abilities and Related Characteristics Possessed by Beginning Office Workers in the State of Connecticut.	6528
2. An Experimental Study to Evaluate the Introduction of a Vocationally Oriented Program at the Junior High School Level.	6523

F. Electro-Mechanical Technicians. The following proposal was submitted by Mr. Douglas Fellows, University of Hartford under Section 4 (c) of the Vocational Act of 1963 for which assistance was received from the Research Coordinating Unit:

1. Experimental Curriculum for Electro-Mechanical Technicians in Computer and Business Machine Technology. Contract No. OEG-1-6-061489-2022.

G. Continuation of Research Coordinating Unit. The State Department of Education, Division of Vocational Education received approval of the following proposal under Section 4 (c) of the Vocational Education Act of 1963:

1. Continuation of the Research Coordinating Unit in the Connecticut State Department of Education. Contract No. OE-5-85-112.

H. Pilot Programs, Ancillary Funds. The following pilot programs were financed under Section 4 (a) of the Vocational Education Act of 1963:

	PROJECT NUMBER
1. Establishment of An Experimental Shorthand Laboratory for Hartford and Bulkeley High Schools.	6531
2. An Experimental Typewriting Program for Ninth Grade Students in Hartford High School.	6532
3. An Experimental Program in Distributive Education Pertaining to the Wholesale Industry for Senior Students in Hartford High Schools.	6533

I. Instrument Makers Survey. The following survey was conducted by The Connecticut State Department of Labor at the request of the Division of Vocational Education:

1. A Survey of Thirty-Five Firms in the Waterbury Area to Determine Possible Employment and Future Needs for Instrument Makers.	663

V. Application of Data Processing Techniques to Research.

A. Federal Reports. The Research Coordinating Staff has been developing procedures for using data processing techniques for enrollment and follow-up reports. Codes are being assigned to all vocational courses operated or supervised by the Division of Vocational Education. Forms were developed for use with an optical scanning device for portions of the annual enrollment report and for the entire follow-up survey. Both of these projects are underway at the present time. An evaluation of them is planned upon completion.

B. Position Control. In an effort to explore the value of data processing as it relates to personnel accounting.

in the State Department of Education, the Division of Vocational Education has undertaken a small scale experiment in data processing which involves over 800 of its employees. This project is still in the developmental stage.

C. Programming Workshop. The Research Coordinating Unit staff participated in a programming workshop sponsored by the State Department of Education for education personnel. As a result of this workshop, the staff became familiar with language, programming procedures, and operational aspects of computers.

D. Studies Utilizing Data Processing Techniques. The principal investigators of two studies previously mentioned in this report; namely, the study of beginning office workers, Project No. 6528, and the study of health occupations, Project No. 6521, have included data processing techniques in their studies.

VI. Occupational Trends and Emerging Occupational Fields.

A. Hartford Area Health Occupations Study, Project No. 6521

Findings in the Hartford area indicate there will be a need for 8,526 trained persons in five years and 15,859 in ten years for the 50 health service occupations investigated. Greatest demands are in the nursing field with 6,159 staff nurses, needed in ten years. In technical and other occupations, there will be needed in the next ten years a total of 322 medical laboratory technicians, 367 dental hygienists, 136 x-ray technicians, 436 chairside dental assistants, 265 secretary-dental assistants and 901 secretary-receptionists.

B. Waterbury Area Health Occupation Study, Project No. 6521. Trends in health occupations in Waterbury show that there will be a need for 2,130 trained persons in five years and 3,664 in ten years for the 38 health occupations surveyed. Greatest demands are also in the nursing field with 1,714 staff nurses, 660 nurse aides, and 210 licensed practical nurses needed in ten years. In technical and other occupations, there will be a demand in the next ten years for a total of 42 laboratory technicians, 63 dental hygienists, 68 chairside dental assistants, 60 secretary-dental assistants and 247 secretary receptionists.

C. Curriculum Guide in Food Handling and Distribution, Project No. 6525. A general survey of over 100 food store managers and department foremen was carried out to establish their training background, the need for training to obtain their position and the potential for vocational training in the food distribution industry. Nearly all the career food store employees began as part-time clerks in grocery stores and worked their way up to administrative positions.

The reaction of industry personnel toward a vocational food distribution program in high school was noted. All persons in a hiring capacity that were interviewed regarded this proposed program in food handling and distribution as having great potential for developing career food distribution personnel. They also stated that they were willing to cooperate by providing occupational experience and practical laboratory illustrations for students.

D. Fishery Survey, Project 6511. Findings showed that there was little need for formal training in this area as the commercial fisheries industry in Connecticut appeared to be a declining industry.

E. Air-Conditioning and Refrigeration Survey, Project No. 6512. The survey indicated that there was an immediate need to upgrade workers in the industry and that fundamental training should be provided for youth planning to enter this field. Because of the difficulty involved in identifying present numbers and future needs in this industry under existing conditions, it was recommended that a more comprehensive study in this field be conducted after July 1,1967 when service workers, other than governmental unit employees, will be required to obtain a license.

F. Auto-Body Survey Project No. 6514. The survey indicated that the greatest immediate needs were for auto body workers in the Hartford, Bridgeport, and New Haven areas. The Norwalk, Stamford and New London areas showed that some consideration should be given to auto body training programs in these areas in the near future.

G. Instrument Makers Survey. Findings in the instrument makers survey indicated that there would be approximately fifty additional trained workers needed annually by Waterbury area manufacturers in the immediate future.

The survey was initiated in order to obtain information regarding future curriculum needs for the instrument making course at the Warren F. Kaynor Regional Vocational-Technical School in Waterbury. Revision of the present curriculum has been initiated in order to meet the job requirements.

VII. Staff Participation in Conferences and Seminars

A. Out-of-State Activities. Members of the Research Coordinating Unit attended the following conventions, seminars and conferences:

1. Research Coordinating Unit Clinic, Washington: July 29-30, 1965. H.Righthand and M. Ross.
2. Convention, American Vocational Association, Miami: December 5-9, 1965. H. Righthand and E. Terrell.
3. Seminar for Research Coordinating Units, Columbus: January 31-February 4, 1966. P. Masley.
4. American Educational Research Association, Chicago: February 16-18, 1966. H. Righthand.
5. National Seminar on Research in Vocational and Technical Education, Colorado: March 28-April 1, 1966. E. Terrell.
6. U. S. Office of Education Regional Conference, Boston: March 8-12, 1966. H. Righthand, P. Masley, R. Bennett, and R. Wilson.
7. Leadership Development Seminar, University Park, Maryland: May 30-June 10, 1966. R. Wilson.
8. Tri-State Vocational Agriculture Conference, Amherst: June 29, 1966. P. Masley and H. Righthand.
9. Research Coordinating Unit Conference, Washington: September 21 and 22, 1966. H. Righthand and P. Masley.

B. State-Wide Activities. The Research Coordinating Unit staff participated in the following state-wide meetings:

1. Connecticut Medical Association, Hartford: July, 1965. H. Righthand.
2. Bureau of Vocational Services Conference, Berlin: September, 1965. Staff.
3. Connecticut State Department of Health, Hartford: October, 1965. H. Righthand.
4. State Advisory Committee for Distributive Education, West Haven: January, 1966. H. Righthand.
5. State Advisory Committee for Business Education, Hartford: May, 1966. H. Righthand, P. Masley.
6. Vocational Guidance Workshop, West Haven: April 15-16, 1966. H. Righthand, E. Terrell, R. Wilson.
7. State Advisory Committee for Trade, Industrial and Technical Education, Hartford: May,1966. H. Righthand.
8. State Advisory Committee for Health Education, Hartford: March, May and November, 1966. H. Righthand, P. Masley.

CONCLUSIONS

1. The number of research activities and the value of these studies conducted by the Division of Vocational Education justified the expansion of the present research staff. A total of thirty-five reports, pilot programs, research studies and surveys were initiated or completed by local schools, institutions of higher learning and the Division of Vocational Education.

2. There is sufficient evidence that there is a willingness on the part of many agencies to cooperate with the Research Coordinating Unit in the conduct of vocational research. The number of associations, organizations, institutions and agencies included in this report tends to support this evidence. The resources and staff of the Connecticut State Labor Department have proven very helpful.

3. The large amount of research studies and published materials in vocational education points out the necessity for an orderly process of collection and dissemination. Over 250 publications and research studies pertaining to vocational education have been filed with a cross reference index in the Hine Library in the Connecticut State Department of Education. Approximately 3500 Vocational Research Quarterly newsletters were distributed to fifty states, to Connecticut school counselors and administrators and to numerous federal, state and local agencies. Twelve research studies and surveys conducted or supported by the Research Coordinating Unit were sent to interested groups within and outside of the state with an estimated 4000 copies disseminated.

4. Initial steps have been taken in incorporating data processing techniques in the Division of Vocational Education. Efforts have been made to incorporate data processing in such areas as enrollment and follow-up reports, position control for vocational personnel and workshops in programming for the research staff. However, the potential benefits derived through the use of data processing require additional study.

5. Occupational trends and the emergence of new occupations justify the need for research studies that keep abreast of changing employment patterns. Research conducted or supported by the Research Coordinating Unit pertaining to the health service occupations, fisheries, auto body, air conditioning and refrigeration industries provide valid evidence in determining whether vocational programs should be developed in these areas.

6. The Connecticut State Department of Education has recognized the importance of keeping Research Coordinating Unit staff members abreast with new developments in vocational research. The research staff has participated in nine national and regional conventions, seminars and conferences pertaining to vocational research.

7. There are many advantages of including the existing state advisory committees as an additional resource for the determination of research priorities. The research staff has attended all of the state advisory committee meetings to date.

RECOMMENDATIONS

1. Consideration should be given to continued support by the U. S. Office of Education in providing financial assistance to the State Research Coordinating Units. Without Federal support some of the research and related activities conducted by these units would not have been possible.

2. The working relationships between the Research Coordinating Unit and existing state advisory committees should be continued. The liaison between state advisory committees and the Research Coordinating Unit has been very effective in the determination of research priorities, conduct of research and especially in the implementation of research. The existing state advisory committees are in the position to make recommendations to the State Board of Education with regard to program development in Vocational education. These recommendations have been particularly effective as a result of recent research findings.

3. Consideration should be given for continued dissemination of the Vocational Research Quarterly newsletter and research studies for an additional year or until such time as ERIC becomes fully operational.

4. Initial steps have been taken in the utilization of data processing techniques for Federal reports and position control in the Division of Vocational Education, State Department of Education. The incorporation of data processing as a method of automating reporting procedures should be extended.

5. The Research Coordinating Unit should strive to continually maintain the fine working relationship with the Research Division of the Connecticut State Department of Labor. The assistance given to the Research Coordinating Unit by the Labor Department particularly in the conduct of surveys pertaining to occupational information has been very helpful in program development in vocational education.

6. The opportunity should be explored for encouraging more research on the local level. Some research studies have been initiated by local schools but additional research should be stimulated in this area.

7. The State Department of Education should continue to recognize the importance of research seminars, conferences and conventions as means of providing the Research Coordinating Unit Staff with the latest developments in research as it applies to vocational education.

APPENDICES

APPENDIX A

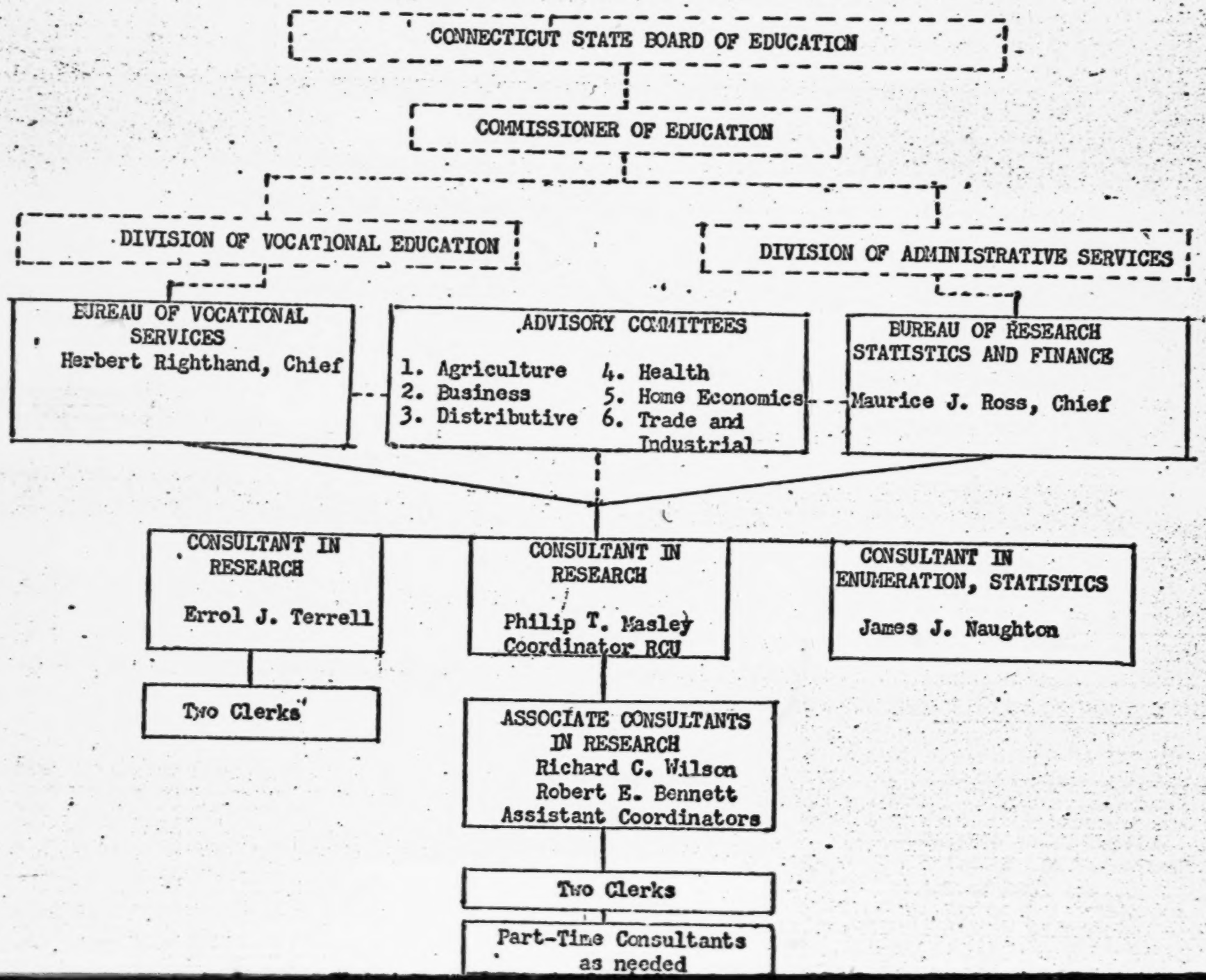
Page

Original Organizational Chart of Research Coordinating Unit A1

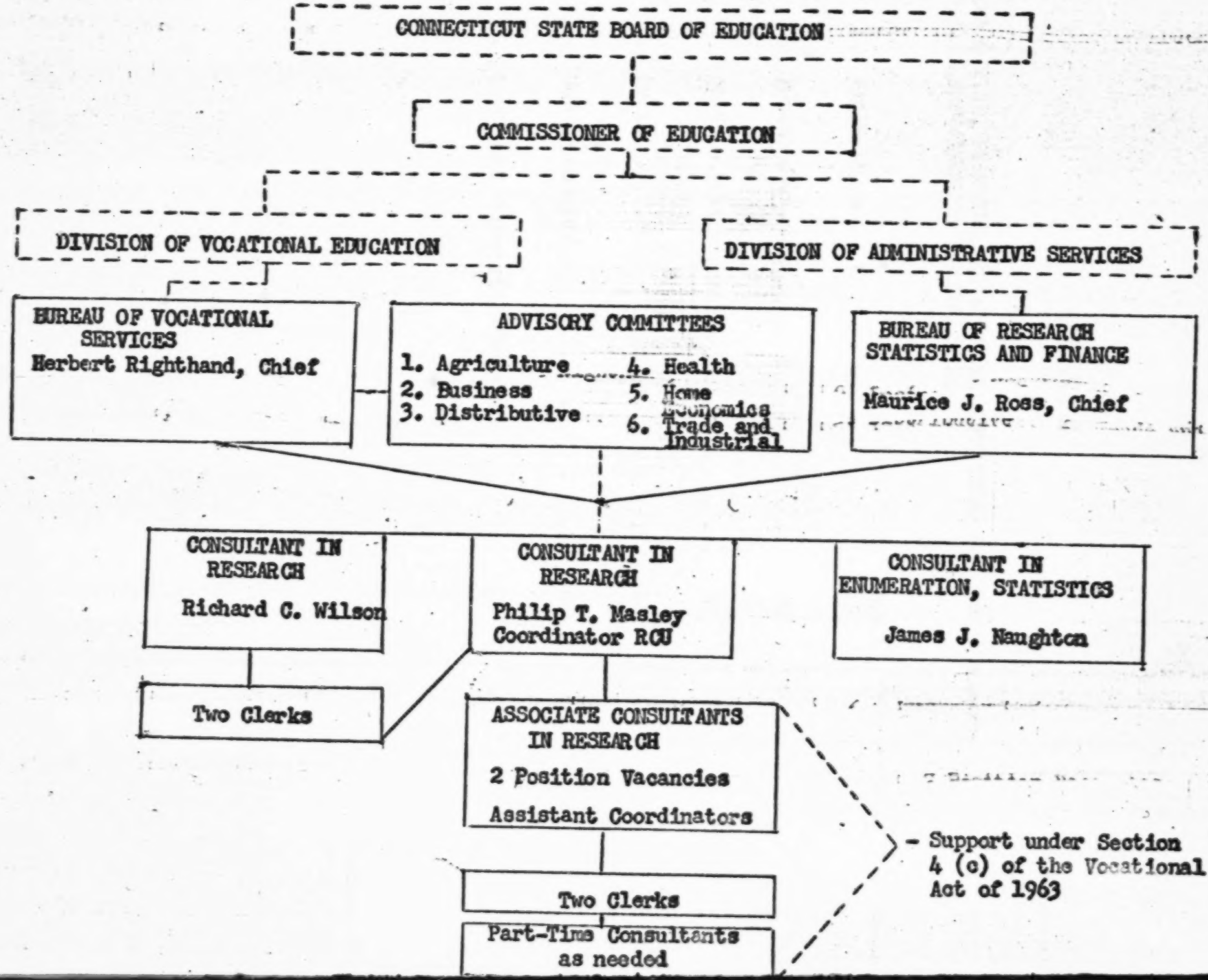
Revised Organizational Chart of Research Coordinating Unit A2

APPENDIX A1

ORGANIZATION CHART FOR RESEARCH COORDINATING UNIT



APPENDIX A2


CONNECTICUT STATE BOARD OF EDUCATION
COMMISSIONER OF EDUCATION
DIVISION OF VOCATIONAL EDUCATION
DIVISION OF ADMINISTRATIVE SERVICES
BUREAU OF VOCATIONAL SERVICES
Herbert Righthand, Chief
ADVISORY COMMITTEES
1. Agriculture
2. Business
3. Distributive
4. Health
5. Home Economics
6. Trade and Industrial
BUREAU OF RESEARCH STATISTICS AND FINANCE
Maurice J. Ross, Chief
CONSULTANT IN RESEARCH
Richard C. Wilson
CONSULTANT IN RESEARCH
Philip T. Masley
Coordinator RCU
CONSULTANT IN ENUMERATION, STATISTICS
James J. Naughton
Two Clerks
ASSOCIATE CONSULTANTS IN RESEARCH
2 Position Vacancies
Assistant Coordinators
Two Clerks
Part-Time Consultants as needed
- Support under Section 4 (c) of the Vocational Act of 1963

APPENDIX B

STATE CONSULTING, PLANNING, AND ADVISORY COMMITTEES FOR THE RESEARCH COORDINATING UNIT INCLUDE THE FOLLOWING:

		Page
1.	Agriculture	B1
2.	Business	B2
3.	Distributive Education	B3
4.	Health	B4
5.	Home Economics	B5
6.	Trade and Industrial Education	B6

STATE VOCATIONAL AGRICULTURE CONSULTING COMMITTEE

1966 - 1967

Mr. Frank Atwood
Farm Program Director
Radio Station WTIC
Hartford 15

Mr. Charles Barr, Secretary
Connecticut Florists Assoc.
Exec. Secretary, Conn.
Nurserymens' Association
584 Campbell Avenue
West Haven 16 - Box 352

Mr. Ellis Clark
50 Knollwood Road
Newington

Mr. Thomas Clark
FFA President
Chestnut Hill
Lebanon

Dr. Ralph M. Gantz
Superintendent of Schools
27 Hillside Place
New Britain

Commissioner Joseph N. Gill
State Dept. of Agriculture
State Office Building
Hartford

Mr. Karl Gometz
67 Lafayette Street
Hartford

Dr. James G. Horsfall, Director
Conn. Agr. Experiment Station
123 Huntington Street
New Haven 4 - Box 1106

Mr. Robert deC Hughes
Executive Secretary
Conn. Milk for Health
101 Reserve Road
Hartford

Dr. E. J. Kersting, Dean
College of Agri.
University of Conn.
Storrs.

Mr. Floyd Laird
Sharon

Dr. W. Howard Martin
Associate Professor
Agricultural Education
University of Conn.
Storrs

Mr. Samuel Orr
Mgr., Conn.-Mass.
Tobacco Co-Op
968 Farmington Ave.
West Hartford

Mr. Frank W. Roberts
R. F. D. #2
Middletown

Mr. Henry Schoebel
Director, Secondary Education
Glastonbury High School
Glastonbury

Mr. Arvid H. Seaburg, Jr.
Public Relations
Arbor Acres
Glastonbury

Mr. John Seremet, Mgr.
Conn. Milk Producers Assoc.
Milk Lane
Newington

Mr. David N. Stiles
Conn. Light & Power Co.
P. O. Box 2010
Hartford

Mr. George W. Simpson, Jr.
Executive Secretary
Connecticut Farm Bureau
101 Reserve Road
Hartford

Mr. Donald Cook
E. O. Smith High School
Storrs

Mr. Herman Weingart, Jr.
Route 87
Franklin

Mrs. Richard G. Williams
State Grange
Goodale Hill Road
Glastonbury

STATE CONSULTING COMMITTEE FOR BUSINESS AND OFFICE EDUCATION

1966 - 1967

Mr. Robert O. Bowles
Executive Director
Urban League of Greater New Haven
153 Court Street
New Haven, Connecticut

Mr. J. Nelson Bridges
Special Assistant to the President
Scoville Manufacturing Company
99 Mill Street
Waterbury, Connecticut

Mr. William B. Cafky
Executive Vice-President
Connecticut State Chamber of Commerce
410 Asylum Street
Hartford, Connecticut

Mr. Nicholas E. D'Agostino
Principal
Wolcott High School
Wolcott, Connecticut

Mr. Thomas Decker
Personnel Manager
Chesebrough-Ponds, Incorporated
Clinton, Connecticut

Mr. John V. Fratus
Director, Employee Relations
United Illuminating Company
New Haven, Connecticut

Mr. Ralph Gantz
Superintendent of Schools
27 Hillside Place
New Britain, Connecticut

Mr. Ernest A. Hallstrom, A.D.
State of Conn. - Personnel Dept.
State Office Building
Hartford, Connecticut

Mrs. Regina Peterson
Personnel Supervisor
Bridgeport Brass Company
Bridgeport, Connecticut

Miss Dorothy Petty
Supervisor
General Dynamics
Electric Boat
Groton, Connecticut

Mr. Donald Rose
Employment Manager
Pitney-Bowes
69 Walnut Street
Stamford, Connecticut

Mr. Robert Summitt
Assistant Treasurer - Manager
Root & Boyd, Incorporated
55 Center Street
Waterbury, Connecticut

Mrs. Marion C. Welch
Employment Supervisor
The Stanley Works
New Britain, Connecticut

Mr. John Wilcox
Vice President
Connecticut Bank and Trust Co.
Hartford, Connecticut

Miss Stella Willins
Director
Educational Service
Royal McBee
Hartford, Connecticut

THE CONNECTICUT DISTRIBUTIVE EDUCATION CONSULTING COMMITTEE

1966 - 1967

Paul M. Andrews, Regional Representative
Sperry and Hutchinson Co.
393 South Meriden Road
Cheshire, Connecticut

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Thermo Fax Sales Company
67 Whitney Avenue
New Haven, Connecticut

Maurice Berins, Vice President
G. Fox & Co.
Main Street
Hartford, Connecticut

J. M. C. Betts, Vice President
United Illuminating Co.
New Haven, Connecticut

Nathan Blumenthal
D. Blumenthal, Inc.
128 Main Street
Danielson, Connecticut

Lewis D. Boynton, Chairman
Business Education
Central Connecticut State College
New Britain, Connecticut

John J. Brassil, Manager
Sears Roebuck Co.
Corbin Corner
West Hartford, Connecticut

H. C. Bush, President
New Life Insurance Management Corp.
111 Pearl Street
Hartford, Connecticut

W. Bradford Cafky
Executive Vice President
Connecticut Chamber of Commerce
410 Asylum Street
Hartford, Connecticut

Carl Candels, Secretary
Hotel - Motel Association
410 Asylum Street
Hartford, Connecticut

Josiah Chandler
Connecticut Bankers Association
Constitution Plaza
Hartford, Connecticut

Frederick Cook
Connecticut Petroleum Council
410 Asylum Street
Hartford, Connecticut

Cornelius P. Courtney
Executive Director
Connecticut Food Stores Assoc.Inc.
410 Asylum Street
Hartford, Connecticut

Elwood M. Davis, Vice President
Pitney Bowes Co.
Stamford, Connecticut

Joseph D. Devine, C.L.U.
Connecticut General Life Insurance Co.
309 State Street
New London, Connecticut

Frank J. Donovan
Superintendent of Schools
Wallingford, Connecticut

Harvey R. Fuller
Administrative Assistant
Fuller Brush Company
East Hartford, Connecticut

Thomas F. Garvey, Personnel
Supervisor
First National Stores
Oakland Avenue
East Hartford, Connecticut

Richard Hare, Vice President
M. Schiavone and Sons
137 Front Street
New Haven, Connecticut

Henry Holdridge
United Airlines
Statler Hotel
Hartford, Connecticut

James E. Kelley, President
Kelley Food Lockers
Isham Road
West Hartford, Connecticut

THE CONNECTICUT DISTRIBUTIVE EDUCATION CONSULTING COMMITTEE

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Berlin, Connecticut

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A & P Food Stores
29 Worthington Street
Springfield, Massachusetts

Barbara Lincoln, Personnel Director
Sage-Allen and Company
896 Main Street
Hartford, Connecticut

Milton Mandelson, Vice President
D. M. Read Co.
Bridgeport, Connecticut

Harold Pevner
Pevner's Drug Store, Inc.
26 Front Street
Putnam, Connecticut

Sherwood H. Prothero
Executive Vice President
Norwalk Chamber of Commerce
Norwalk, Connecticut

Wallace Rubin
Wayside Furniture Company
Milford, Connecticut

Bernard Shelton, Chairman
Director of Public Relations
Litchfield County National Bank
New Milford, Connecticut

George Underwood
Executive Vice President
Chamber of Commerce
Bristol, Connecticut

Thomas Welch, D.E. Coordinator
Lyman Hall High School
Wallingford, Connecticut

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STATE CONSULTING COMMITTEE FOR TRAINING IN HEALTH OCCUPATIONS

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Mr. Herbert Anderson	Executive Director	Connecticut Hospital Assoc.
Horton G. Chaucer, M.D.	President	Conn.Public Health Assoc.
Mr. Francis P. Dellafera	President	Conn.Chronic Convalescent and Hospital Assoc.
Miss Frances Fisher	President-Elect	Conn.Dental Assistant Association
Mr. Edward Geibel	President	State Advisory Committee to the L.P.N. Program
Mrs. M. Patrick Harris	President	Connecticut Licensed Practical Nurses Assoc.
Mrs. Jean Lewis	President	Connecticut School Dental Hygienist Assoc.
Miss Eleanor Lundblad	Executive Director	Connecticut Nurses Assoc.

STATE CONSULTING COMMITTEE FOR TRAINING IN HEALTH OCCUPATIONS

(CONTINUED)

Bernard F. Mann, Jr., M.D.	Chairman	Connecticut State Medical Society
A. Howard McLaughlin, D.D.S.	President	Connecticut State Dental Association
William Richards, M.D.	General Manager	Connecticut State Medical Society
Miss Lillian Reilly	Chief Nursing Examiner	Connecticut State Board of Examiners for Nursing
James E. C. Walker, M.D.	Professor of Medicine and Society	University of Conn. School of Medicine and Dental Science

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STATE DEPARTMENT PLANNING COMMITTEE FOR HOME ECONOMICS EDUCATION

1966 - 1967

Teacher Education

Dr. Barbara Osborn - Teacher - Educator,	University of Connecticut Storrs
Mrs. Barbara Gross - Teacher - Educator,	Saint Joseph College West Hartford

Chairmen State Committees

Mrs. Ruth Wodock, State Committee for Home Economics Teacher	Danbury High School Danbury
Mrs. Katherine Eilert, City Supervisor	Greenwich Board of Education Greenwich
Mrs. Martha Bradley, FHA State Advisor	Thomaston High School Thomaston

Representative Administration and Adult Education

Mr. Ralph Gantz, Superintendent Representing Connecticut Association Public School Superintendents, New Britain

Mr. Martin Fagan, Principal Representing Connecticut Association Secondary School Principals and Directors of Adult Education, Rockville

STATE DEPARTMENT PLANNING COMMITTEE FOR HOME ECONOMICS EDUCATION

(CONTINUED)

Homemakers

Mrs. Martha Smith Fry, Homemaker — Middlefield

Mrs. William J. Fox, State FHA Mother — Jewett City

Fields of Work

Mr. Sidney Dawson, Owner, Norwich Inn
Darien

Miss Lucille Refsauge - Head Dietitian, — Hartford Hospital
Hartford

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CONNECTICUT CONSULTING COMMITTEE FOR TRADE, INDUSTRIAL AND TECHNICAL EDUCATION

1966 - 1967

Mr. Paul Andrews
393 South Meriden Road
Cheshire

Dr. Edward L. Bartholomew, Jr.
Professor Chemical Engineering
University of Connecticut

Mr. Roland Bixler, President
JBT Instruments, Inc. - Box 1818
(133 Hamilton Street)
New Haven

Mr. Dean Brossman, Exec. Vice President
The Management Council of Southwestern
Connecticut, Inc., Stamford

Mr. William Curtis
Superintendent of Schools
1146 Main Street
Manchester

Mr. Arthur DuBois
Naugatuck Valley Industrial Council
1 Central Avenue
Waterbury

Mr. Leo Dunn
Deputy Commissioner
State Labor Department
Hartford

Mr. Joseph Bober, Secretary-Treas.
Connecticut State Labor Council
9 Washington Avenue
Hamden

Mrs. Ruth Greenberg
Director of Education
Connecticut State Labor Council
9 Washington Avenue
Hamden

Mr. Harry Hyman, State Supervisor
Bureau of Apprenticeship and Trng.
U. S. Department of Labor
Hartford

Mr. John Iorio, President
Nutmeg Screw Machine Products Corp.
Wolcott Road
Waterbury

Mr. LeRoy Jones, Director
Connecticut State Development Comm.
Hartford

Mr. Thomas A. Kirkwood
Personnel Director
Edwards Company, Inc.
Norwalk

CONNECTICUT CONSULTING COMMITTEE FOR TRADE, INDUSTRIAL AND TECHNICAL EDUCATION

(CONTINUED)

Mr. Joseph Dyer, Director
Office of Economic Opportunity
State Capitol - Room 306
Hartford

Dr. G. Roy Fugal, Director of Training
General Electric Company
570 Lexington Avenue
New York City, New York

Mr. Ralph M. Gantz
Superintendent of Schools
27 Hillside Place
New Britain

Mr. Haige Garabedian, Exec.Secretary
Printing Industry Association
200 Farmington Avenue
Hartford

Mr. Joshua Goldman
Consulting Mechanical Engineer
Hadlyme

Mr. Stefan Grapnel
Chief Engineer
Belding Heminway Company
Putnam

Mr. Paul Mali, Director of Education
and Training
Electric Boat Division
General Dynamics Corporation
Groton

Mr. Matthew Moriarty
Moriarty Brothers Motors, Inc.
Manchester

Mr. Nathaniel W. Morrow, Vice Pres.
New Britain Machine Company
New Britain

Mr. Henry Nolan, Secretary
Stamford Central Labor Union Council
Stamford

Mr. Raymond C. Schmitt
President and Treasurer
Aero Gasket Corporation
Meriden

Mr. Anselm Talalay, General Manager
B. F. Goodrich Company
415 Howe Street
Shelton